July 12, 1996

Subject: Bridge Load Carrying Capacity Rerating Program

#96-11

County Engineers/Superintendent of Highways

In response to a 1991 National Bridge Inspection Standards (NBIS) audit conducted by the Federal Highway Administration's Office of Inspector General, the Department has developed a policy to rerate bridges and culverts for load-carrying capacity to account for existing deterioration. Essentially, the bridges affected by this policy are: 1) those that were in fair to good condition but are now receiving poor condition ratings during routine NBIS inspections and; 2) those that have been reported as being in poor condition for an extended period of time and have not been rated for load carrying capacity for ten years. The draft policy intended to identify structures needing to be rerated is included in this letter. This policy was submitted as a draft to the Federal Highway Administration (FHWA) in 1991 and is scheduled for inclusion in the next revision of the policy manuals of the Bureau of Local Roads and Streets.

RERATING POLICY

- 1. Re-evaluation of load carrying capacity must be performed when significant deterioration in critical areas has occurred since the prior Routine NBIS Inspection. Such deterioration is indicated when consecutive NBIS inspections indicate a reduction of the condition appraisal of the superstructure (Item 59), substructure (Item 60) or culvert (Item 62) to a level of "4", "3", or "2" or when the deck appraisal (Item 58) falls to "3" or "2". (An appraisal of "1" or "0" indicates that the bridge is closed, hence no need for further load rating.)
- 2. When there has been no recent condition appraisal reduction but a structure is in a deteriorated state, rerating shall be performed at a 10 year maximum interval. The specific criteria for this provision are as follows:
 - i. A condition appraisal of "3" or less for Item 59, 60 or 62 or, "2" or less for Item 58.
 - ii. Posting required: Item 59, 60 or 62 is "4" or, Item 58 is 3.

Printouts of the structures currently requiring rerating based on this rerating policy are being furnished to the district Bureaus of Local Roads and Streets and the districts will provide you with this information.

The effort to rerate structures according to this policy is not intended to require local agencies to retain the services of a structural engineer for rerating of structures. The Local Bridge Unit of the Bureau of Bridges and Structures will undertake to reevaluate the affected structures using Department personnel.

Given the number of structures that will require rerating, we cannot with any accuracy predict the amount of time it will take for the Local Bridge Unit to complete the reratings. At the local agency's prerogative, in order to expedite rerating, a consulting engineer may be retained. All consultant ratings must be submitted to the Bureau of Bridges and Structures for concurrence in accordance with the procedures provided in Chapter 5, Section 9.1.d(2), of the Bureau of Local Roads and Streets' Administrative Policies manual. Consultant ratings should be done in accordance with the 1994 AASHTO Manual for the Condition Evaluation of Bridges and should provide an inventory and operating rating (HS vehicle); identify the controlling member and state the recommended posting as it should appear on the posting sign. If a consulting engineer is retained to perform the inspection and load rating, the Local Bridge Unit should be notified in order to avoid a duplication effort. If the Local Bridge Unit is not notified by the local agency that affected structures will be rerated by a consulting engineer, the Local Bridge Unit will automatically schedule and perform a field inspection and loadcarrying analysis on the selected bridges.

For those bridges being rerated by the Department, local agencies can assist in prioritizing the inspections and reratings by informing the Local Bridge Unit of their plans to replace or rehabilitate bridges affected by this policy, by visiting the bridge site to determine if a structure is in need of immediate attention and by contacting the Local Bridge Unit to provide specific information on severe structural deterioration. If local agency input is not provided, bridge reratings will be prioritized according to the current NBIS data on condition and deterioration, the time since the last load rating and the bridge location.

Counties should continue to submit requests for load reratings for any structure if they feel there is a special need. Such requests should include documentation of the reason for the request, including photographs, plans, inspection reports, etc., so that the rerating may be properly prioritized. To assist the Department in responding to load rating requests, a "local Agency Load Rating Request" form (BLR 5918) has been prepared and a copy is attached. In order to keep response time and paperwork to a minimum, the preferred method of submittal for such requests is by letter directly to the Bureau of Bridges and Structures with a copy furnished to the district.

We appreciate the efforts that the local agencies have always made to ensure that bridges in Illinois are properly inspected and evaluated. Your continued assistance is essential to completing the evaluation of approximately 1200 structures that currently require rerating under this program. Personnel from the Local Bridge Unit will contact you to schedule inspections and you will be provided the opportunity to participate in the inspection, if you should wish to do so. Questions regarding the rerating program or scheduling of inspections may be directed to Nick Sovell, Local Bridge Liaison Engineer, at 217/785-8668.

Very truly yours,

Ralph É. Anderson

Engineer of Bridges and Structures

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